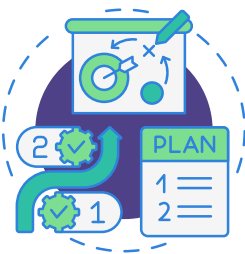
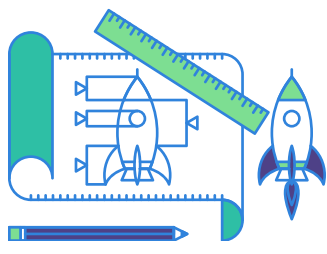




# Design Process Template

## Exploring the Issues: Engineering Design Process

| Initiating & Planning                                                              | Performing & Recording                                                             | Analyzing & Interpreting                                                            | Communicating                                                                        |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |  |

## Reflect

What were the big ideas shared on this field trip?

**What are some of the issues or problems related to these big ideas?**

**List as many as you can think of, and then pick the one that most interests you to explore further!**

## Initiating & Planning

**Research and understand a problem**

**Empathize:** What big idea or issue listed above interests you most? Why?

Who does it impact? Why does it matter?

**Define:** What problem are you trying to solve? What information do you need? What limitations and materials do you have?

**Ideate and generate potential solutions**

There are NO bad ideas at this point in the process. Note down all your ideas (you never know what might come in handy later!). You may want to use a bigger writing space like a white board, notebook paper, or a digital tool.

# Performing & Recording

**Select an option and develop a prototype**

Make sure to record your ideas (pictures, videos, written documentation, etc).

**Test the prototype**

Try it out! Identify the strengths and challenges of the prototype. Failure is an option and a great learning opportunity. Keep track of it, even if (especially if!) it doesn't work like you planned. This will help you in the next step.

# Analyzing & Interpreting

**Evaluate and revise the prototype**

What can you add/change to your prototype to make it more successful, easier to use, or more effective?

# Communicating

**Communicate the solution**

Share what you have created (or attempted to create) with an audience, including your teacher and classmates. Consider reaching out to people in the community you identified in the Initiating & Planning stage of the process; they will have the best, most authentic feedback. You can also [share with E2](#). We would love to see how you applied what you learned!